Application No.: 09/943,914 Docket No.: 29248/37609

REMARKS

The applicants respectfully traverse the rejection of claims 1-8 and 12-18 as being anticipated by Millsap et al. (U.S. Patent No. 6,484,082). The applicants have amended the claims canceling claims 1-18 and adding new claims 19-32. New claims 19-32 consolidate related aspects of the claimed inventions in permissible Markush format, correct antecedent inconsistencies and otherwise clarify and define the invention.

The applicants submit the rejection of claims 1-8 and 12-18 is moot in view of the foregoing amendments. Nonetheless, the applicants address the rejections in view of the newly presented claims. Each of claims 19-32 recite a vehicle including a plurality of network elements coupled by connection media forming an active network wherein the network elements process a data packet based on an active portion of the data packet. In this regard, new claims 19-32 more clearly recite the active network as disclosed in the specification and presented many times over to the Examiner. Millsap does not disclose an active network and most certainly does not disclose a plurality of network elements that process data packets based on an active portion of the data packets. Therefore, Millsap cannot anticipate the pending claims.

Millsap discloses a vehicle network system that comprises a set of electronic control units (ECUs) connected to a serial communication bus. Millsap discloses that these ECUs remain in a low power state incapable of communication until the ECUs are enabled for communication by a virtual network message (VNM). Millsap discloses that each ECU is able to process a VNM based on information preprogrammed into the ECU. Contrary to the contention raised by the examiner in the Office action, the ECU of Millsap cannot be an active network element, as recited by the pending claims, because the ECU does not act upon

the VNMs based on a portion of the VNMs, but instead processes the VNM based on information already programmed into the ECU. It follows that Millsap's ECUs are not the claimed active network elements.

The Office action further analogizes the VNMs of Millsap to the data packets of the pending claims. However, as recited by the pending claims, the active network elements process data packets based on an active portion of the data packets. While the Office Action points to a VNM message frame 80 that is used to partition the data carried by the VNM into three separate portions, none of these portions is an active portion, as recited by the pending claims, because the network elements do not engage these portions in order to process a data packet.

As further clarified by claim 20, the active portion may include, among other things, data utilized by or relating to the function of the devices and network elements of the active network. Millsap does not disclose a data packet containing data directing how network elements and devices are to operate. Instead, Millsap only discloses that its VNMs contain data (network identifier bytes) that indicate which ECUs to keep active. The virtual network messages themselves do not contain any information on how to process information in a data packet. The functional data provided by the active portion, on the other hand, contains information on processing the data packets themselves or functionality of the network elements themselves.

For at least the reason that Millsap does not disclose an active network comprising a plurality of active network elements that process data packets based on an active portion of the data packets, Millsap cannot anticipate claims 19-32.

The applicants further submit that Mills does not anticipate the newly presented claim 20 because the active portion provides functional data related to the operation of one of the first device and the second device. Millsap does not disclose providing functional data to any device on the network. Even assuming that an ECU could be a network element, Millsap discloses that the ECU is preprogrammed with control logic to process the VNM, and therefore inherits its functionality solely from the preprogrammed control logic, not from the VNM. Therefore, Millsap cannot anticipate claim 3.

Similarly, Millsap fails to disclose that the active portion contains network timing information. Millsap does not disclose that its data messages contain any timing information. The Office action cites columns 3 and 7 for such a disclosure. Columns 3 and 7, however, disclose no such timing information within the data message itself. Instead, columns 3 and 7 disclose the use of an ECU counter which measures the period of time between reception of virtual network messages. This measurement, however, is independent of the information contained within the VNMs, i.e., the VNMs do not contain any timing information. Therefore, Millsap fails to disclose an active portion containing network timing information and thus, cannot anticipate claim 20.

Millsap further fails to disclose a packet state. Instead, Millsap discloses that its VNM messages are formatted to include a frame header field (indicating a VNM header and source ECU), a message type field (indicating initial or follow-up VNM), and network identifier field (used to specify which ECUs to activate). Millsap does not disclose that any of these fields indicate a state of the packet, much less one indicating a routing preference, error state, or processing preference.

Also, contrary to the contention raised in the Office action, Millsap does not disclose any error information contained in its VNM. While Millsap discloses that the network may incorporate some error processing scheme, it does not specifically disclose that any data packets contain error state information. Furthermore, contrary to the contention raised in the Office action Millsap at columns 6 and 8 does not, in any manner, disclose a receipt acknowledgment message.

The newly presented claims are further patentable over the combination of Millsap in view of Tennenhouse et al. While Tennenhouse discloses an active network having routers and switches as network elements, the Office action fails to demonstrate where in Tennenhouse or Millsap one skilled in the art would find the motivation to combine or modify these systems. The Office action conclusively states that "it would have been obvious to one skilled in the art at the time of the invention to be motivated to specify the active network elements because [sic] would provide safe and efficient execution of assigned tasks and improve flexibility, thereby tailoring specific node processing." However, to establish prima facie obviousness, there must be some teaching, suggestion, or motivation from the prior art to make the proposed combination or modification. *In re Royka*, 490 F.2d 981, 984 (CCPA 1974). One cannot rely upon the mere fact that references can be combined or modified, unless the prior art also suggests the desired combination. MPEP § 2143.01 citing *In re Mills*, 916 F.2d (Fed. Cir. 1992). Therefore, the Office action fails to make a prima facie case for obviousness.